

GULIYEV, N.A.

Polarisation of neutrons scattered on Cu and Al nuclei. Uch.sap.AGU.
no.8:23-29 '57. (MIRA 11:11)

(Neutrons—Scattering) (Polarization (Electricity))

GULIYEV, N.A.

Polarization of neutrons in scattering on carbon in the
pseudoscalar theory. Izv. AN Azerb. SSR. Ser. fiz.-mat. i
tekhn. nauk no.5:83-85 '59. (MIRA 13:3)
(Neutrons--Scattering)

83194

S/056/60/039/002/031/044
B006/B070

24.6600

AUTHORS: Guliyev, N. A., Epshteyn, E. M.

TITLE: Bremsstrahlung From a Distributed Proton 19

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1960,
Vol. 39, No. 2(8), pp. 432 - 433

TEXT: A. I. Akhiyezer and A. G. Sitenko have already treated similar problems (Refs. 1,2). They have not, however, taken into account the anomalous magnetic moment and the "blurring" of the proton, which is of particular significance according to experimental investigations of the scattering of fast electrons from protons. The consideration of the interaction between the proton and the mesonic vacuum is particularly important for large recoils of the proton. It has been shown already that, in order to take this interaction into account, the interaction operator γ_μ from the current density formula of the proton, $u_2 \gamma_\mu u_1$, must be replaced by the vertex operator Γ_μ (defined by formula (1); see Ref. 4).
The authors of the present paper have used this method to investigate the

Card 1/3

4

83194

Bremsstrahlung From a Distributed Proton

S/056/60/039/002/031/044
B006/B070

(4)

effect of the structure and the anomalous magnetic moment of the proton on its bremsstrahlung during diffractional scattering in the nuclear field. It is assumed that the appearance of the "blurred" proton is independent of the kind of electromagnetic process and depends only on the magnitude of the recoil of the proton. In the expression for the matrix element of the bremsstrahlung of ultra-relativistic protons in a central field, γ_μ is replaced by $A\gamma_\mu - (iB/2M)\gamma_\mu k$. For not too high accelerations of the proton during the emission, and, therefore, for not too high energies of the emitted photons, A and B are functions only of $E\omega - \frac{1}{2}pk$. By this the authors obtain for the formula (4), which differs from that obtained by Sitenko only in the factor F^2 (see L. D. Landau and I. Ya. Pomeranchuk, Ref. 5). Formula (4) is no more valid when $E\omega - \frac{1}{2}pk \sim M^2$. The effect of the "structure" of the proton on the diffractional production of electron - positron pairs during the scattering of the proton in a central field may be taken into account in an analogous manner. There are 5 Soviet references.

Card 2/3

Bremsstrahlung From a Distributed Proton

83194
S/056/60/039/002/031/044
B006/B070

ASSOCIATION: Institut fiziki Akademii nauk Azerbaydzhanskoy SSR
(Institute of Physics of the Academy of Sciences of the
Azerbaydzhanskaya SSR)

SUBMITTED: March 19, 1960

Card 3/3

S/056/62/043/004/049/061
B104/B186

AUTHORS: Gulyev, N. A., Epshteyn, E. M.

TITLE: The transformation of an electron-positron pair into a μ -meson pair

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 43,
no. 4(10), 1962, 1517-1520

TEXT: The energies of the colliding particles in the c.m.s. have to exceed 106 Mev to give rise to $e^- - e^+ \rightarrow \mu^- + \mu^+$ processes. At these energies the experimental results differ from those of quantum electrodynamics because the equations are modified to small intervals, to the nonlocality of interaction, to the definite structure of the interacting particles and to their nonelectromagnetic interaction. Mathematically, the modification of the electrodynamic equations to small intervals is equivalent to the form factors involved in the expressions for the matrix elements of the particle flux when the locality of interaction is perturbed (S. D. Drell, Ann. of Phys., 4, 75, 1958; A. I. Nikishov, ZhETF, 36, 1323, 1959). The "structure" of the particles involved in the process

Card 1/6

S/056/62/043/004/049/C61
B104/B186

The transformation of an ...

can be taken into account when the matrix γ_v in the particle flux density $\bar{u}(p_2)\gamma_v u(p_1)$ is substituted by the vertex operator

$$\Gamma_v(q) = a(q^2)\gamma_v + \frac{ib(q^2)}{4M} [\gamma_v, \hat{q}] \quad (1)$$

where $q = p_2 - p_1$, $a(q^2)$ and $b(q^2)$ are invariant functions and M is the particle mass. When due consideration is given to the extent that electrons and muons are "expanded", the matrix element of the process will have the form

$$S = (2\pi)^4 \frac{e^2}{q^2} \delta(p_- + p_+ - P_- - P_+) \left\{ \bar{v}(-p_+) \left[a(q^2) \gamma_v - \frac{ib(q^2)}{4M} (\gamma_v \hat{q} - \hat{q} \gamma_v) \right] u(p_-) \right\} \left\{ \bar{U}(P_-) \left[A(q^2) \gamma_v + \frac{iB(q^2)}{4M} (\gamma_v \hat{q} - \hat{q} \gamma_v) \right] V(-P_+) \right\}, \quad (2),$$

Card 2/6

S/056/62/043/004/049/061
B104/B186

The transformation of an ...

where $q = p_+ + p_- = P_+ + P_-$; here the capital letters refer to electrons, the small letters to muons. The differential cross section is

$$\begin{aligned} d\sigma/d\Omega = & \frac{1}{16} r_0^2 \lambda^2 \sqrt{1-\Lambda^2} \{ |a(q^2)|^2 |A(q^2)|^2 [1 + \Lambda^2 + (1 - \Lambda^2) \cos^2 \theta] + \\ & + 12 \operatorname{Re}[a(q^2) b^*(q^2)] \operatorname{Re}[A(q^2) B^*(q^2)] + 4 |a(q^2)|^2 \operatorname{Re}[A(q^2) B^*(q^2)] + \\ & + 2 \operatorname{Re}[a(q^2) b^*(q^2)] |A(q^2)|^2 (2 + \Lambda^2) + \\ & + |a(q^2)|^2 |B(q^2)|^2 \Lambda^{-2} [1 + \Lambda^2 - (1 - \Lambda^2) \cos^2 \theta] + \\ & + |b(q^2)|^2 |A(q^2)|^2 \Lambda^{-2} [1 - (1 - \Lambda^2) \cos^2 \theta] + \\ & + 2 \operatorname{Re}[a(q^2) b^*(q^2)] |B(q^2)|^2 \Lambda^{-2} (1 + 2\Lambda^2) + \\ & + |b(q^2)|^2 |B(q^2)|^2 \Lambda^{-2} \Lambda^{-2} [\Lambda^2 + (1 - \Lambda^2) \cos^2 \theta] + \\ & + 2 |b(q^2)|^2 \operatorname{Re}[A(q^2) B^*(q^2)] \Lambda^{-2} \}, \end{aligned} \quad (3)$$

where r_0 is the classical electron radius, $\lambda = m/E$, $\Lambda = M/E$. For the case
Card 3/6

S/056/62/043/004/049/061
B104/B186

The transformation of an ...

in which the electron pairs are annihilated, the total cross section reads

$$\begin{aligned}
 \sigma = & \frac{1}{4} \pi r_0^2 \lambda^2 \sqrt{1 - \Lambda^2} \left\{ \frac{2}{3} |a|^2 |A|^2 (2 + \Lambda^2) + \right. \\
 & + 12 \operatorname{Re}(ab^*) \operatorname{Re}(AB^*) + 4 |a|^2 \operatorname{Re}(AB^*) + \\
 & + 2 |A|^2 \operatorname{Re}(ab^*) (2 + \Lambda^2) + \frac{2}{3} |a|^2 |B|^2 \Lambda^{-2} (1 + 2\Lambda^2) + \quad (4). \\
 & + \frac{1}{3} |b|^2 |A|^2 \Lambda^{-2} (2 + \Lambda^2) + 2 \operatorname{Re}(ab^*) |B|^2 \Lambda^{-2} (1 + 2\Lambda^2) + \\
 & \left. + 2 \operatorname{Re}(AB^*) |b|^2 \Lambda^{-2} + \frac{1}{3} |b|^2 |B|^2 \Lambda^{-2} \Lambda^{-2} (1 + 2\Lambda^2) \right\}.
 \end{aligned}$$

The correctness of quantum electrodynamics can be evaluated by determining the angular dependence of the differential cross section ($d\sigma(\theta)$) at a given energy and by constructing $[S(\theta) = [d\sigma(\theta) - d\sigma_0(\theta)] / d\sigma_0(\theta)]$, where

Card 4/6

S/056/62/043/004/049/061
B104/B186

The transformation of an ...

$d\sigma_0(\theta)$ is the differential cross section for $a = A = 1$, $b = B = 0$;
 $d\sigma_1(\theta)$ is the differential cross section calculated on the basis of
"pure" quantum electrodynamics, inclusive of radiation corrections.
S is found to be a straight line $S = f(E)$ if one of the two first-
mentioned mathematically equivalent perturbances of quantum electro-
dynamics is present. $S(\theta) = f_1(E) + f_2(E) \cdot \cos^2 \theta$ holds if a vertex
operator has to be introduced. Conclusions: The formulas (3) and (4)
are suitable for describing electrodynamic processes of the form

$e^- + e^+ \rightarrow f + \bar{f}$; where f and \bar{f} are particles and antiparticles (other
than electron or positron) which can be described by a spinor. These
formulas are less suitable in the case of strong interaction.

ASSOCIATION: Institut fiziki Akademii nauk Azerbaydzhanskoy SSR
(Institute of Physics of the Academy of Sciences
Azerbaydzhanskaya SSR)

Card 5/6

The transformation of an ...

S/056/62/043/004/049/061
B104/B186

SUBMITTED: May 8, 1962

✓

Card 6/6

GULIYEV, R.G.

Extended perforated pipe for multistage cementing. Neftianik 2
no.6:25 Je '57. (MIRA 10:10)

1. Machal'nik proizvodstvenno-tehnicheskogo otdela kontory bureniya
neftepromyslovogo upravleniya Siazan'neft'.
(Oil well cementing)

GULIYEV R.G.

GULIYEV, R.G.

New method for oil well cementing. Neftianik 2 no.8:19 Ag '57.
(MIRA 10:10)

1. Nachal'nik proizvodstvenno-tehnicheskogo otdela kontory
bureniya neftepromyslovogo upravleniya Siazan'neft'.
(Oil well cementing)

GULIYEV, R.G.; SHIKHALIYEV, F.A.

Preventing well deflection in Siazan' wells [in Azerbaijani with
summary in Russian]. Azerb. neft. khoz. 36 no.10:13-15 O '57.
(Siazan' District--Oil well drilling) (MIRA 11:2)

GULIYEV, R.R., aspirant

Resistance of the skin capillaries in osteocarticular tuberculosis
in surgical clinical practice. Azerb. med. zhur. no.12:36-42 '62.
(MIRA 17:4)

1. Iz kafedry gospital'noy khirurgii (zav. - zasluzhennyy deyatel'
nauki, prof. B.M. Makhmudbekov) Azerbaydzhan'skogo gosudarstvennogo
instituta imeni Narimanova.

GULIYEV, R.R.

State of vascular tone and arterial pressure according to the
oscillographic data in patients with bone and joint tuberculosis.
Izv. AN Azerb. SSR. Ser. biol. i med. nauk no.2(17) 126 '63.
(NIRA 17:5)

GULIYEV, S.M.; ABDINOV, M.A.

Determining hydraulic losses in drilling [in Azerbaijani with
summary in Russian]. Azerb.neft.khoz. 36 no.8:9-11 Ag '57.
(MIRA 10:11)
(Oil well drilling)

GULIYEV, Sh.A.

History of rice culture in Azerbaijan. Dokl. AN Azerb. SSR 21
no.7:80-84 '65. (MIRA 18:12)

L 49787-65 EPF(n)-2/EPA(s)-2/ENT(1)/ENT(m)/ENG(m)/T/ENT(b)/ENT(t)/EWA(L)
Pt-7/Pu-4/Peb/Pz-6 IJP(c) RDW/RW/JD/JG/AT
ACCESSION NR: AP5009362 UR/0363/55/001/002/0171/0172

AUTHOR: Nikol'skaya, G. F.; Gulyev, T. N.; Yefimovskiy, I. V.; Kagirova, G. N.

TITLE: Conductivity of solid and molten indium triselenide

SOURCE: AN SSSR. Izvestiya. Neorganicheskiye materialy, v. 1, no. 2, 1965.
171-172

TOPIC TAGS: indium triselenide, conductivity, phase equilibrium, semiconductor

ABSTRACT: The purpose of this work was to prove the existence of four modifications of indium triselenide, to obtain information on the electrical conductivity of its high temperature forms and to investigate the conductivity changes of fused indium triselenide as a function of temperature. Conductivity polytherms of indium triselenide are shown in fig. 1 of the Enclosure. The discontinuities on the conductivity polytherm at 210, 642 and 765°C indicate the existence of four different forms of indium triselenide. The activation energy values, calculated by the least squares method, for the 6-phase of three different samples are in good agreement (0.97 ± 0.01 ev). Indium triselenide melt, which is stable, also exhibits semiconducting properties. Orig. art. has: 1 figure and 2 tables.

Card 1/12

L 49787-65

ACCESSION NR: AP5009362

ASSOCIATION: Institut obshchey i neorganicheskoy khimii im. N. S. Kurnakova
(Institute of General and Inorganic Chemistry)

SUBMITTED: 25Nov64

ENCL: 01

SUB CODE: EM, IO

NO REF Sov: 003

OTHER: 006

Card 2/3

L 58709-65 EWT(1)/EWT(m)/T/EWF(t)/EEC(b)-2/EWF(b)/EWA(c)

Pi-1 LJP(c)

JD/GG

ACCESSION NR: AP5016582

UR/0363/65/001/005/0690/0691

546.682¹231:543.422.4

AUTHOR: Zorina, Ye. L.; Velichkova, V. B.; Gulyev, T. N.

26

25

B

TITLE: Infrared absorption of single crystals of indium selenides

SOURCE: AN SSSR. Izvestiya. Neorganicheskiye materialy, v. 1, no. 5, 1965, 690-691

TOPIC TAGS: indium selenide, selenide crystal structure, infrared absorption spectrum

ABSTRACT: The infrared spectra of single crystals of the low-temperature α -modification and high-temperature γ -modification of In_2Se_3 and also of In_5Se_6 single crystals were studied. The spectra were taken with an IKS-14 spectrophotometer in the 0.67-25 μ region. The IR spectrum of an In_5Se_6 single crystal 0.31 mm thick is shown in Fig. 1 of the Enclosure. The maximum transmittance was 44%, and the absorption edge was at about 8.6 μ (0.140 eV). In the case of $\alpha\text{-In}_2\text{Se}_3$, the maximum transmittance of a single crystal 0.13 mm thick was 29%; the absorption edge was at 1.04 μ (0.18 eV). Fig. 2 of the Enclosure shows the IR spectrum of a single crystal of $\gamma\text{-In}_2\text{Se}_3$ 0.014 mm thick. From the relation between the log of the transmittance and the thickness of the sample, the coefficients of absorption (A) and reflection (R) were determined for $\gamma\text{-In}_2\text{Se}_3$. The refractive index (n) was calculated from the reflection. Energies of direct and indirect transitions

Card 1/4

L 58709-65

ACCESSION NR: AP5916582

were calculated from the dependence of the absorption coefficients on the photon energy ($\hbar\nu$), and found to be 1.150 and 1.00 eV, respectively. Orig. art. has 3 figures.

ASSOCIATION: Institut obshchey i neorganicheskoy khimii im. N. S. Kurnakova Akademii nauk SSSR (Institute of General and Inorganic Chemistry, Academy of Sciences, SSSR)

SUBMITTED: 19Feb65

ENCL: 02

SUB CODE: IC, CP

NO REF SOV: 001

OTHER: 001

Card 2/4

L 60962-65 EEC(8)-2/EWA(h)/EWA(c)/EWT(l)/EWT(m)/ENG(n)/EWP(p)/T/EWP(s)
P1-4/P2-6/Pab IJP(c) RDW/GG/JT/JD

ACCESSION NR: AP5018914

UR/0363/65/001/006/0345/0847
546.682'23

45
44
43

AUTHOR: Gulyev, T. N.; Medvedeva, Z. S.

TITLE: Preparation of In sub 2 Se single crystals

SOURCE: AN SSSR. Izvestiya. Neorganicheskiye materialy, v. 1, no. 4, 1966, 840-847

TOPIC TAGS: Indium selenide, semiconductor crystal

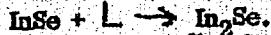
ABSTRACT: Indium selenide (In_2Se), synthesized from the elements and containing some free indium, was crystallized by a chemical transport reaction with iodine and also by Bridgman's crystallization method. In the first method, fine particles of polycrystalline In_2Se , obtained in a horizontal furnace by saturating indium with selenium, were placed with a weighed amount of iodine in a quartz ampoule which was evacuated to 10^{-3} mm Hg, then placed in a double-zone furnace at 480 and 380°C and kept there for 50 hr. As a result, very brittle whiskers of single-crystal In_2Se , 2.5 mm long, grew on the surface of the charge in the "hot" zone. In the second method, the process was carried out in a double-zone vertical furnace (upper zone at 600°C, lower zone at 480°C) through which a quartz ampoule containing the charge was moved at the rate of 0.3 to 3 mm/hr. In

Card 1/2

L 60962-65

ACCESSION NR: AP5018914

accordance with the phase diagram of the In - Se system, the peritectic reaction of formation of In_2Se proceeds in such manner that InSe crystals separate and, by reacting with the liquid, yield In_2Se :



Crystallization of In_2Se from a melt with 95 at. % indium at a displacement rate of the ampoule of 3 mm/hr and zone temperatures of 600 and 480C, whiskers of single-crystal In_2Se 3-4 mm long were obtained. Orig. art. has: 2 figures.

ASSOCIATION: Institut obshchey i neorganicheskoy khimii im. N. S. Kurpakova Akademii nauk SSSR (Institute of General and Inorganic Chemistry, Academy of Sciences SSSR)

SUBMITTED: 18Feb65

ENCL: 00

SUB CODE: SS, G C

NO REF SOV: 004

OTHER: 003

App
Card 2/2

L 59477-65 EEC(b)-2/EFF(n)-2/EPA(s)-2/EWA(c)/ERT(1)/ERT(4)/ERT(m)/T/EWP(5)/EWP(t)
ACCESSION NR: AP5018915 PI-1/Pt-7/Pu-4 IJP(c) UR/0343/65/001/006/0546/0832
RDW/GG/MM/JG/JD 546.612'231 548.55

AUTHOR: Medvedeva, Z. S.; Guliyev, T. N.

TITLE: Growing single crystals of indium selenides from the vapor phase

SOURCE: AN SSSR. Izvestiya. Neorganicheskiye materialy, v. 1, no. 6, 1965,
848-852

TOPIC TAGS: indium selenide, single crystal growth, compound semiconductor, vapor phase growth, chemical transport reaction

ABSTRACT: Semiconductor single crystals of In_2Se , In_5Se_6 , InSe , $\alpha\text{-In}_2\text{Se}_3$, $\delta\text{-In}_2\text{Se}_3$, $\gamma\text{-In}_2\text{Se}_3$, and $\beta\text{-In}_2\text{Se}_3$ have been grown from the vapor phase by using chemical transport reactions with iodine. This method was preferred over the previously used Bridgman and zone-melting techniques because of the inherent shortcomings of the previous methods and the impossibility of obtaining In_2Se_3 crystalline forms other than $\alpha\text{-In}_2\text{Se}_3$. Polycrystalline In_2Se and In_5Se_6 and monocrystalline InSe prepared by oriented crystallization (from melt) were used as starting materials for growing single crystals of In_2Se , In_5Se_6 , and InSe , respectively. Polycrystalline In_2Se_3 in any crystalline form could be used as the starting material for obtaining single-crystal In_2Se_3 in a given crystalline form. Operating procedures were described

Card 1/2

L 59477-65

ACCESSION NR: AP5018915

for growing single crystals of each In-Se compound and each crystalline form of In_2Se_3 . Great care was taken to make high-purity products. The essential condition for single-crystal growth was to maintain a very narrow but constant temperature gradient between the "hot" and "cold" zones in the quartz ampul. The crystalline form of In_2Se_3 was also determined by the temperature of crystallization which had to be maintained within the range of crystallization of a given form. Dimensions, habit, and system of the crystal were given for each In-Se compound. Formation of dendrites or whiskers was observed in some cases. X-ray analysis confirmed the composition and crystalline form of the compounds. Formation of intermediate crystalline products, such as InSeI , InI , and, possibly, other iodides was observed under certain conditions and was believed to take place in all diffusion processes involved in the transport reactions of indium selenides with iodine. Orig. art. [JK] has: 3 figures and 1 table.

ASSOCIATION: Institut obshchey i neorganicheskoy khimii im. N. S. Kurnakova Akademii nauk SSSR (Institute of General and Inorganic Chemistry, Academy of Sciences, SSSR)

SUBMITTED: 19Feb65

ENCL: 00

SUB COME: SS

NO REF Sov: 006

OTHER: 003

ATD PRESS: 4054

Card 2/2 NO >

L 62631-55
ACCESSION NR: AP5018242

UR/0078/65/010/007/1520/1523
546.682'231

6

B

AUTHOR: Gulyev, T. N.; Medvedeva, Z. S.

TITLE: The compound In sub 5 Se sub 6

SOURCE: Zhurnal neorganicheskoy khimii, v. 10, no. 7, 1965, 1520-1523

TOPIC TAGS: indium selenide crystal, semiconductor synthesis, lattice constant

ABSTRACT: The object of this work was to find an efficient method for the synthesis of single-crystal and polycrystalline In_5Se_6 and to study some of its properties. The polycrystalline compound was prepared from the elements in a two-zone furnace. Thermograms of the synthesis showed that In_5Se_6 is formed at 300-320°C with a large exothermic effect, and that a peritectic reaction and decomposition of the compound occur at 630°C. Single crystals were prepared by directional crystallization in a vertical furnace at a displacement rate of the ampoule of 1.2 mm/hr, maximum temperature gradient of 60-70°C, and maximum zone temperature of 700°C. X-ray diffraction in the single crystals was used to determine the constants of the monoclinic lattice of In_5Se_6 , which were found to be:

Card 1/2

L 62631-65

ACCESSION NR: AP5018242

$a = 17.48$, $b = 4.09$, $c = 9.37 \text{ kx}$, and $\beta = 101^\circ$. The experimental and theoretical values of $\sin^2 \theta$ were determined, as was the number of particles in the unit cell (two). The composition of the crystals of the peritectic compound In_5Se_6 was confirmed by chemical analysis. The density of In_5Se_6 is 5.66 g/cm^3 .
Orig. art. has: 3 figures and 1 table.

ASSOCIATION: None

SUBMITTED: 01Dec64

NO REF Sov: 002

ENCL: 00

OTHER: 001

SUB CODE: IC

Card 2/2

KIRILL'YAKA, G.P.; GRIGOR'YEV, V.A.; RUMYANTSEV, V.V. et al. Conductance of indium triselenide in the small and large polystyrene. Izv. AN SSSR. Neorg. mat. 1 no.4:17-20 1965.

(MERA 18:7)

1. Institut obshchey i neorganicheskoy khimii imeni M. V. Lomonosova
AN SSSR.

GULIYEV, T.N.; MEDVEDEV, Z.S.

Preparation of In₂Se single crystals. Izv. AN SSSR. Neorg.
mat. 1 no.6:845-847 Je '65. (MIRA 18:8)

1. Institut obshchey i neorganicheskoy khimii imeni N.S.
Kurnakova AN SSSR.

MEDOVNIKOV 4-1965 L.N.

Growing of indium selenide single crystals from the gaseous phase. Izv. AN SSSR. Neorg. mat. 1 no.6:848-852 Je '65.
(MIRA 18:8)

L. Institut obshchey i neorganicheskoy khimii imeni N.S.
Kurnakov AN SSSR.

GULIEV, Z. N., MUDVEDEV, V. V.

In₅Se₆ compound. Zhur. neorg. khim. 10 no. 7 p 1520-1525
JL '65. (MIRA 18(8))

(A) L 13567-66 EWT(m)/ETC(F)/EWG(m)/EWF(t)/EWP(b) IJP(c) RGW/JD

ACC NR: AP6001229

SOURCE CODE: UR/0363/05/001/012/2128/2133

AUTHOR: Medvedeva, Z. S.; Guliyev, T. N.

ORG: Institute of General and Inorganic Chemistry im. N. S. Kurnakov, Academy of Sciences, SSSR (Institut obshchey i neorganicheskoy khimii Akademii nauk SSSR)

TITLE: Indium selenide In_2Se_3

SOURCE: AN SSSR. Izvestiya. Neorganicheskiye materialy, v. 1, no. 12, 1965, 2128-2133

TOPIC TAGS: indium compound, selenide, phase transition, crystal growing, single crystal growing, INORGANIC SYNTHESIS, METAL CRYSTALLIZATION

ABSTRACT: The conditions of synthesis of four In_2Se_3 modifications in the polycrystalline state were studied in the course of thermal treatment of a nonequilibrium alloy synthesized from the element. Also studied were the conditions of preparation of In_2Se_3 -single crystals by oriented crystallization according to Bridgman, in a vertical furnace and during zone melting. It was shown that α - In_2Se_3 single crystals are thus formed which can be converted into β - and γ - In_2Se_3 by annealing. As a rule, δ - In_2Se_3 samples obtained by annealing α - In_2Se_3 single crystals are substantially damaged because of marked differences in the structural type of these modifications. During the crystallization, purification of In_2Se_3 takes place. The transitions of In_2Se_3 modifications involve the following density changes:

Card 1/2

UDC: 546.682'23

L 13567-66

ACC NR: AP6001229

200°C 650°C 750°C

(α) 5.67 → (β) 5.36 → (γ) 5.48 → (δ) 5.78 g/cm³

α- and β-In₂Se₃ have a semiconductor-type temperature dependence of the electrical conductivity; γ- and δ-In₂Se₃ did not show any change in electrical conductivity with temperature when the samples were studied in air at 25 — 180C. Orig. art. has: 4 figures and 2 tables.

SUB CODE: 11, 20 / SUBM DATE: 19Jun65 / ORIG REF: 008 / OTH REF: 003

Card

2/3

L 38813-66 EWT(m)/T/EWP(t)/ETI LJP(c) REN/JD
ACC NR: AR0021030 SOURCE CODE: UR/0058/66/000/002/A088/A088

AUTHOR: Medvedeva, Z. S.; Guliyev, T. N.

503 16

TITLE: Use of the method of chemical transport reactions to obtain single crystals of indium selenides

SOURCE: Ref zh.Fiz, Abs. 2A661

REF SOURCE: Sb. Materialy dokl. 1-y Nauchno-tekhnn. konferentsii Kishinevsk. politekhn. in-ta. Kishinev, 1965, 70-71

TOPIC TAGS: indium compound, selenide, iodine, crystal growth, fiber crystal, crystal lattice structure, lattice parameter

ABSTRACT: The method of chemical transport reactions, using I₂ as the carrier, was used to obtain single crystals of indium selenide and of modifications of In₂Se₃ under different conditions. Variation of the crystallization conditions made it possible to realize the following: 1) Crystal growth without a temperature gradient during the process of mineralization, in which the iodine is a medium for recrystallization of powders; 2) crystal growth with transport of matter from the "cold" into the hot zone and vice-versa; 3) growth without the carrier participating; 4) different crystal shapes - plate-like or three-dimensional, dendritic, whiskers, etc. Most of them are single crystals. The lattice periods of In₅Se₆ and of γ - and δ -In₂Se₃ are determined. The structures of In₅Se₆ and γ - and δ -In₂Se₃ are calculated.
[Translation of abstract]

SUB CODE: 20

Card 1/1

GULIYEV, V. Sh.

USSR/Cultivated Plants - Grains

M-4

Abs Jour : Ref Zhur - Biol., No 1, 1958, No 1518

Author : T.I. Gaziyev, V. Sh. Guliyev

Inst : Not Given

Title : Corn and its Viological Peculiarities.

Orig Pub : Azerb. mektebi, 1956, No 10, 37-41

Abstract : No abstract

Card : 1/1

KULIYEV, S.M.; KULIYEV, A.E.; GULIYEV, Yu.E.

Lengthening the drilling column. Dokl. AN Azerb. SSR
16 no. 6:549-551 '60. (MIRA 13:10)

1. Institut energetiki AN Azerbaydzhanskoy SSR.
(Boring machinery)

GULIYEV, Yu.E.

Operating conditions of electric stations of a power system in
dry years. Izv. AN Azerb. SSR. Ser. fiz.-mat. i tekhn. nauk
no.4:53-57 '63. (MIRA 16:12)

GULIYEV, Yu.E.

Optimum conditions of electric power plants of power system in
years abounding with water. Za tekhn.prog. 3 no.12:9-12 D '63.
(MIRA 17:2)

1. Energeticheskiy institut im. I.G.Yes'mana.

GULIYEV, Yusif Mustafayevich; KOSTYUKOVA, A.A., redaktor; IVANOV, K.A.,
redaktor izdatel'stva; LAVRENOVA, N.B., tekhnicheskiy redaktor.

[Screw propellers; a textbook for maritime schools and courses
for the improvement of officers in the Ministry of the Navy]
Grebnye vinty; uchebnoe posobie dlja morekhodnykh uchilishch
i kursov usovershenstvovaniia komandnogo sostava Ministerstva
morskogo flota. Moskva, Izd-vo "Morskoi transport," 1956. 115 p.
(MIRA 1076)

(Propellers)

MAGULA, Valentin Emmanuilovich, kand. tekhn. nauk; DRUZ', Boris
Ivanovich, kand. tekhn. nauk; KULAGIN, Vitaliy
Dmitriyevich, kand. tekhn. nauk; Prinimal uchastkiye
LUKIN, G.Ya., kand. tekhn. nauk; GORYANSKIY, Yu.V., dots.,
retsenzent; GULIYEV, Yu.M., dots., retsenzent; KOKEHANOVSKIY,
K.V., dots., retsenzent; LEBEDEV, A.M., dots., retsenzent;
SPITKOVSKIY, M.I., dots., retsenzent; VASIL'YEV, I.V., dots.,
retsenzent; SERKO, G.S., red.; TIKHONOVA, Ye.A., tekhn.red.

[Theory and the structural arrangement of ships] Teoriia i
ustroistvo sudov. Moskva, Izd-vo "Morskoi transport," 1963.
(MIRA 17:3)
494 p.

GULIYEV, Yu.M., kandidat tekhnicheskikh nauk.

Experimental investigation of water resistance during rolling.
Sudostroenie 23 no.6:9-11 Je '57. (MLRA 10:7)
(Ships--Hydrodynamics)

GRECHIN, Modest Alekseyevich; GULIYEV, Yu.M., red.; ALEKSANDROV,
L.A., red. izd-va; KHLPOPOVA, L.K., tekhn. red.

[Changes made in screw propeller elements according to
results of actual tests] Izmenenie elementov grebnykh
vintov po rezul'tatam naturnykh ispytanii. Moskva, Izd-vo
"Morskoi transport," 1962. 45 p. (MIRA 15:7)
(Propellers)

GULIYEV, Yu.M.; VOROB'YEV, Yu.L.

Experimental investigation of changes in the trim of a ship
in the propulsion of ship models. Sudorem. i sudostro. no.2:
71-76 '63. (MIRA 17:4)

1. Odesskiy institut inzhenerov morskogo flota (for Vorob'yev).

GULIYEV, Yu.M.; VOROB'YEV, Yu.L., inzh.

Experimental investigation of additional resistance during the
propulsion of ship models in waves. Sudorem. i sudastr. no.2:
77-90 '63. (MIRA 17:4)

1. Odesskiy institut inzhenerov morskogo flota (for Vorob'yev).

GULIYEV, Yu.Ye.

Controlling the hydrostations of a power system as a problem
of the shortest way in a labyrinth. Izv. AN Azerb. SSR. Ser.
fiz.-tekhn. i mat. nauk no.6:69-74 '64.

(MIRA 18:6)

GULIYEVA, B.Eh.

Changes in the morphology of peripheral blood and the erythrocyte sedimentation reaction in chronic hepatobiliary disease during treatment with Istisu mineral water. Sbor. trud. Azerb. nauch.-issl. inst. kur. i fiz. metod. lech. no.9:94-97 '63.
(MIRA 18:8)

GULIYEVA, G.A.

Surface evaporation in the coastal area of the southern
Caspian Sea region. Izv. AN Azerb. SSR Ser.geol.-geog.
nauk nefti no.1:103-109 '62. (MIRA 15:5)
(Caspian Sea region--Evaporation)

GULJYFVA, G.A.

Phenomenon of drought in the Kura-Aras lowland in Azerbaijan.
Izv. AN Azerb. SSR. Ser. geol.-geog. nauk i nafti no. 6: 25-31 '63.
(MIRA 18:3)

S/081/61/000/005/014/024
3101/B220

AUTHORS: Dadashov, B. E., Elmammedov, G. H., Guliyeva, K. E.

TITLE: Catalytic dehydrogenation of benzine fractions of characteristic Baku petroleum

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 5, 1961, 535, abstract 5M174 (5M174) ("Azerb. khim. zh.", 1960, no. 2, 61-68)

TEXT: Benzine fractions of petroleum from Mishovdag, Surakhany (selected), Neftyanye kamni, and kalinskaya (upper formation) were dehydrogenated under various conditions, in the presence of a platinum catalyst on activated carbon. When studying the influence of different factors, such as temperature, volume rate, etc. it was found that besides these factors the type of the initial raw material has an important influence on the yield in aromatic hydrocarbons. With benzine fractions of Mishovdag petroleum, at a test temperature of 300°C, the reduction of the volume rate strongly influenced the yield in aromatic hydrocarbons; this could not be observed with benzine fractions of Surakhany selected petroleum.
[Abstracter's note: Complete translation.]

Card 1/1

SOV/24-58-7-25/36

AUTHOR: Guliyeva, N. M. (Baku)

TITLE: On Determination of the Hysteresis of Dissolved Gas (K issledovaniyu gisteresisnykh yavleniy pri rezhime rastvorennoego gaza)

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye tekhnicheskikh nauk, 1958, Nr 7, pp 128-129 (USSR)

ABSTRACT: The experiments were carried out with a modernised apparatus СКВ -5 in order to determine the parameters of gas liberated from oil or dissolved in oil which is found in a porous medium. In order to facilitate the experiment, the nitrogen in the apparatus was displaced by means of clear oil. The porous medium consisted of various types of sand with a permeability of 3-5, 20, 50 and 67 darcies. Figs 1a and 1b show the curves of the gas, constructed from the data obtained by the experiments. It was found that the time required for establishing a normal pressure after the liberation of gas was 8 to 12 min, irrespective of the initial pressure. The relationship between the sand permeability k , viscosity μ and density γ of the oil found from the experiments are given in the table at the top of p 129. The analysis showed that the amount of the non-dissolved gas can be determined from the formulae (1) or (2), where p_0 - saturated pressure,

Card 1/3

SOV/24-58-7-25/36

On Determination of the Hysteresis of Dissolved Gas

p - pressure of flow, m - porosity, k - permeability,
 ρ_o , ρ_g - densities of oil and gas respectively, μ_o , μ_g -
viscosities of oil and gas, respectively. In order to establish
the factors affecting the hysteresis, the additional five
experiments were carried out, for which $k\rho_o p_0 / \mu_o = 27.4$.

Fig 2 illustrates the relationship of $\Delta/v = f(p_0/p)$, which
shows that the relations μ_o/μ_2 and ρ_o/ρ_2 do not affect
 $\Delta v/v$, thus the formula (3) can be derived. As it can be
seen from Eq (3), the effect of μ on the hysteresis is
opposite to that of k , i.e. with an increase of μ_μ ,

Card 2/3

SOV/24-58-7-25/36

On Determination of the Hysteresis of Dissolved Gas

the value of $\Delta v/v$ increases, while an increase K decreases $\Delta v/v$. The author expresses her appreciation to A. Kh. Mirzadzhanzade and A. B. Tsaturyants for valuable help in the experiments. There are 2 figures and 6 references, of which 4 are Soviet and 2 English.

SUBMITTED: December 27, 1957.

Card 3/3

GULIYEVA, N.S.; MARCHENKO, A.I.

Novocaine block in the compound treatment of pyorrhea alveolaris.
Probl. stom. 5:68-73 '60. (MIRA 15:2)

1. Kiyevskiy meditsinskiy institut.
(NOVOCAINE) (GUMS...DISEASES)

GULIYEVA, N.S.

Medial tongue fistula resulting from nonclosure of the thyroglossal duct. Vrach. delo no.2:144-145 F '62. (MIRA 15:3)

1. Kafedra khirurgicheskoy stomatologii (zav. -- prof. N.V. Fetisov) Kiyevskogo meditsinskogo instituta.

(TONG--DISEASES)
(FISTULA)

I 33106-65

ACCESSION NR: AR5002520

8/0299/64/000/022/M017/M017

SOURCE: Ref. zh. Biologiya, Sv. t., Abs. 22M12/4

AUTHOR: Guliyeva, N. S.

TITLE: Homoplasty of postoperative cavities in the jaws with preserved bone

CITED SOURCE: Stomatologiya, no. 3, 1964, 30-32

TOPIC TAGS: human, homotransplantation, bone graft, jaw

TRANSLATION: In 72 patients postoperative cavities in the jaws were filled with homotransplants of bone spongy substance which had been preserved after antibiotic treatment at -20° and -30° for periods of 2 to 40 weeks. To prevent secondary infection the homotransplants were affixed with a polyamide thread and antibiotic was introduced, and for hemostatic purposes the patients were given a lagochylus tincture. X-ray investigation starting with the 7th day and continuing for 12 mos after the operation showed that the homotransplants significantly accelerated the regeneration of host bone

Card 1/2

L 33136-65

ACCESSION NR: AR5002520

tissue. In 61 cases healing took place without complications and in the others suppuration and fistular ducts were observed. Yu. Pashin.

SUB CODE: LS ENCL: 00

Card 2/2

GULIYEVA, N.S., kand.med.muk (Kiyev)

Intracutaneous test using trypan blue in homoplasty of lyophilized
bone in defects of the mandible. Probl. chel.-lits. khir. no.1:57-
60 '65. (MIRA 18:10)

GULIYEV, S. A.

GULIYEV, S. A.- "On the Problem of the Reactiveness of Skin in Cancer Diseases." Azerbaijan State Med Inst, Baku, 1955 (Dissertations for Degree of Candidate of Medical Sciences)

SO: Knizhnaya Letopis' No. 26, June 1955, Moscow

GULIYEVA, S.A., dotsent; ABASKULIYEVA, L.I., kand. med. nauk;
VIDERLI, M.M., kand. med. nauk; ABDULLAYEV, V.M., kand. med.
nauk

Changes in gas exchange and morphological shifts in the
internal organs of irradiated rats. Azerb. med. zhur. no.7:
18-23 Jl '63. (MIRA 17:1)

1. Iz kafedry patofiziologii Azerbaydzhanskogo instituta
usovershenstvovaniya vrachey i Nauchno-issledovatel'skogo
instituta rentgenologii i radiologii Ministerstva zdravo-
okhraneniya Azerbaydzhanskoy SSR.

GULIYEVA, S.A.

Use of cortisone in experimental Brown-Pearce cancer. fit. fiziol.
i eksp. terap. 8 no.1:60-61 Ja-F '64. (MIRA 18.1)

1. Kafedra pat. fiziologii (zav.- dotsent S,A. Guliyeva)
Azerbaydzhanskogo instituta usovershenstvovaniya vrachey,
Baku.

GULIYEVA, S.A. (Baku, prospekt Kirova, 21, kv.11)

Effect of a growth promoting substance of petroleum origin on transplanted tumors. Vop. onk. 10 no.1:17-21 '64.

(MIRA 17:11)

l. Iz kafedry patofiziologii Azerbaydzhanskogo gosudarstvennogo instituta usovershenstvovaniya vrachay (rektor - prof. A.M. Aliyev [deceased]).

ABDULLAYEV, M.D., kand. med. nauk; GULIYEVA, S.A., dotsent

Some comments on S.A. Gulieva's article "Comparative study on the effect of various doses of NRV, a growth promoting substance of petroleum origin on the development of experimental tumors" published in the "Azerbaidzhanskii meditsinskii zhurnal" No.4, 1963. Azerb. med. zhur. 41 no.2:88-99 F '64
(MIRA 18:1)

GULIYEV, S.A., doctor

Metastasizing of sarcoma M.L. Azark. med. nauch. sp. no. 1167
73 Mr '65.

(MRA 1886)

1. Ist kafedry patofiziologii (zavod doktor S.A. Guliyev)
Azerbaydzanskogo gosudarstvennogo instituta nauchno-tekhnicheskogo
vrazhdu imeni Aliyeva (rektor - kand. med. nauk R.M. Aghayev).

3 GULIYEVA, Sh.D.

PISHNAMAZZADE, B.F.; GULIYEVA, Sh.D.

Alkylation of chloromethyl esters of carboxylic acids with
hydrocarbons of the ethylene series. Dokl. AN Azerb. SSR 12 no.12:
895-900 '56. (MLRA 10:8)

1. Institut nefti Akademii nauk Azerbaydzhanskoy SSR. Predstavлено
академиком Академии наук Азербайджанской ССР М.Ф. Нагиевым.
(Alkylation) (Olefins) (Acids, Organic)

PISHNAMAZZADE, B.V.; GULIYEVA, Sh.D.

Synthesis of new representatives of γ -chloroethers. Dokl.AW
Azerb.SSR 13 no.3:271-275 '57. (MLRA 10:7)

1. Institut nefti Akademii nauk Azerbaydzhanskoy SSR. Predstavлено
akademikom Akademii nauk Azerbaydzhanskoy SSR M.F. Nagiyevym.
(Ether)

GULIZADE, M.P.

Methods of studying and calculating the profile of deflected
wells. Azerb.neft.khoz. 35 no.6:7-10 Je '56. (MLRA 9:10)

(Petroleum engineering)

GULIZADE, M.P.

Effect of geological conditions on the azimuth and angle of
curvature of deflected wells. Azerb.neft.khoz. 36 no.1:14-18
Ja '57. (MLRA 10:5)
(Oil well drilling)

GULIZADEH, M.P.

Analytical method for computing and designing plans for directional wells on the basis of inclinograms. Azerb. neft. khoz. 36 no. 4:8-11 Ap '57.
(MIRA 10:6)
(Oil well drilling)

SOV/124-58-8-9216

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 8, p 127 (USSR)

AUTHOR: Gulizade, M.P.

TITLE: The Effect Exerted by Axial Loading on the Elastic Deflective Force During Nonvertical Drilling into the Earth With a Turbo-drill (Vliyaniye osevoy nagruzki na upruguyu otklonyayushchuyu silu pri naklonnom bureniyu turboburom)

PERIODICAL: Izv. vyssh. uchebn. zavedeniy. Neft' i gaz, 1958, Nr 2, pp 33-38

ABSTRACT: Bibliographic entry

Card 1/1

GULIZADE, M.P.

Relation between the mechanical speed and the increase of the
deflection angle in wells. Izv. vys. ucheb. zav.; neft i gaz no.8:
25-30 '58. (MIRA 11:10)
(Oil well drilling)

GULIZADE, M.P.

Possible increase in the alteration angle of directional wells
in the presence of an elastic deflecting force. Izv.vys.ucheb.
zav.; neft' i gaz 1 no.11:21-29 '58. (MIRA 12:5)

1. Azerbaydzhanskiy industrial'nyy institut im. M.Azizbekova.
(Oil well drilling)

GULIZADE, Mammed Pasha Piri oglu, dotsent, kand.tekhn.nauk; SEID-RZA,
M.K., kand.tekhn.nauk, red.; SHTETYNGEL', A.S., red.izd-vs

[Turbodrilling directional wells] Turbinnoe burenie naklonnykh
skvazhin. Baku, Azerbaijanskoe gos.izd-vo neft. i nauchno-
tekhn.lit-ry, 1959. 305 p.
(Oil well drilling) (MIRA 12:8)

GULIZADE, M.P.

Determining elastic deflecting forces in directional drilling.
Izv.vys.ucheb.zav.; neft' i gaz 2 no.11:55-60 '59.
(MIRA 13:4)

1. Azerbaydzhanskiy institut nefti i khimii im. M.Azizbekova.
(Boring)

GULIZADE, M.P.; MAKHMUDOV, D.M.

Equation for calculating the increment of the angle and azimuth
of the crookedness of directional wells in relation to the drilled
distance. Izv. vys. ucheb. zav.; neft' i gaz 3 no.11:33-37 '60.
(MIRA 14:1)

1. Azerbaydzhanskiy institut nefti i khimii imeni N.Azizbekova.
(Oil wells)

GULIZADE, M.P.; MAKHMUDOV, D.M.

Calculating the increment of the angle and azimuth of the crookedness of directional wells in relation to the distance drilled. Izv. vys. ucheb. zav.; neft. i gaz 4 no.6:39-44 '61. (MIRA 15:1)

1. Azerbayzhanskiy institut nefti i khimii imeni M.Azizbekova.
(Oil well drilling)

GULIZADE, M.P., MAKHMUDOV, D.M.

Derivation of an equation for determining the increase in the angle and azimuth of deflection of crooked wells in relation to drilling without a deflector. Izv. vys. ucheb. zav.; neft i gaz 4 no.8:37-44 '61. (MIRA 14:12)

1. Azerbaydzhanskiy institut nefti i khimii imeni M. Azizbekova.
(Oil well drilling)

GULIZADE, M.P.; MAKHMUDOV, D.M.

Calculating the increment of the angle and azimuth of the crookedness
of directional wells in relation to the distance drilled. Izv.vys.-
ucheb. zav.;neft' i gaz 5 no.5:39-44 '62. (MIRA 16:5)

1. Azerbaydzhanskiy institut nefti i khimii imeni M.Azizbekova.
(Oil well drilling)

GULIZADE, M.P., prof., doktor tekhn.nauk, otd. red.; TSEKUN, N.A., dots., kand. tekhn. nauk, zam. otd. red.; NEGRIEYEV, V.F., prof., doktor khim. nauk, red.; SPIRIN, A.A., dots., kand. tekhn. nauk, red.; KLYUCHNIKOVA, I. P., ved. red.; POLOZKOVA, V.V., ved. red.; POLOSINA, A.S., tekhn. red.

[Transactions of the All-Union Interuniversity Scientific Conference on Corrosion Control Problems] Trudy Vsesoiuznoi mezhvuzovskoi nauchnoi konferentsii po voprosam bor'by s korroziей. Moskva, Gostoptekhizdat, 1962. 405 p. (MIRA 16:8)

1. Vsesoyuznaya mezhvuzovskaya nauchnaya konferentsiya po voprosam bor'by s korroziyey. 2. Azerbaydzhanskiy institut nefti i khimii im. M.Azizbekova (for Spirin, TSekun).
(Corrosion and anticorrosives)

GULIZADE, M.P.; SHAKHBAZBEKOV, K.B.; RAPOORT, V.O.; SUZHON, L.Ya.

Studying the force of friction in a deflected well. Izv. vys.
ucheb. zav.; neft' i gaz 6 no.2:23-28 '63. (MIRA 16:5)

1. Azerbaydzhanskiy institut nefti i khimii imeni M.Azizbekova.
(Oil well drilling--Equipment and supplies)
(Friction--Testing)

GULIZADE, M.P.; SHAKHBAZBEKOV, K.B.; RAPOORT, V.O.; SUSHON, L.Ya.

Study of the friction force in lowering the drill column
into an inclined well. Izv. vys. ucheb. zav.; neft' i gaz
6 no.4:15-18 '63. (MIRA 16:7)

1. Azerbaydzhanskiy institut nefti i khimii imeni M.Azizbekova.
(Friction)
(Oil well drilling—Equipment and supplies)

GULIZADE, M.P.; MAKHMUDOV, D.M.

Determining the increase in the angle and azimuth of deflection
of inclined wells in drilling without a deflector. Izv. vys.
ucheb. zav.; neft' i gaz 4 no.12:49-53 '61. (MIRA 16:12)

1. Azerbaydzhanskiy institut nefti i khimii imeni M.Azizbekova.

GULIZADE, M.P.; MAKHMUDOV, D.M.

Effect of certain factors on the change in the angle and azimuth of the hole deviation of inclined wells depending on the footage of drilling without a whipstock. Izv. vys. ucheb. zav.; neft' i gaz 5 no.10:21-25 '62. (MIRA 17:8)

1. Azerbaydzhanskiy institut nefti i khimii imeni M. Azizbekova i AzNIIBurneft'.

GULIZADY, M.P.; MAMMUDOV, D.M.

Determination of the permissible increase in the shaft deflection angle of slant wells. Izv.vys.ucheb.zav.; neft' i gaz 5 no.12: 27-31 '62. (MIRA 17:4)

1. Azerbaydzhanskiy institut nefti i khimii imeni M.Azizbekova, i Azerbaydzhanskiy nauchno-issledovatel'skiy i proyektnyy institut po bureniyu neftyanykh i gazovykh skvazhin.

GULIZADE, M.P.; GEVINYAN, G.M.; BAGIROV, A.Yu.; KULIYEV, R.S.

Cementing slant holes. Izv. vys. zav.; neft' i gaz 7
no.6:17-19 '64. (MIRA 17:9)

1. Azerbaydzhanskiy institut nefti i khimii imeni Azizbekova.

GULIZADE, M.P.; SHAKHBAZBEKOV, K.B.; RAPORT, V.O.; SUSHON, L.Ya.

Investigating the dynamics of the movement of the string in
a slant well. Izv.vys.uchob.zav.; neft' i gaz 7 no. 1:23-28
'64.
(MIRA 17:7)

1. Azerbaydzhanskiy institut nefti i khimii imeni M.Azizbekova,

GULIZADE, M.P.; SHAKHBAZBEKOV, K.B.; IORDANOV, D.S.; KHALIMREKOV, B.M.

Experimental determination of the coefficient of resistance for the movement of pipes in a slant hole. Izv. vys. ucheb. zav.; neft' i gaz. 8 no.5:29-32 '65. (MIRA 18:7)

1. Azerbaydzhanskiy institut nafti i khimii im. M.Azizbekova.

FANIYEV, G.G., inzh.; POMOGALOV, M.I., inzh.; GULI-ZADE, S.B.; YEVSEYEV,
A.G.; ZAREMBO, G.V., inzh.

Automatic gravimetric proportioning of formula components for
margarine at the Baku Margarine Plant. Masl.-zhir. prom. 23 no.12:
35-38 '57. (MIRA 11:2)

1. Giprozhir (for Faniyev). 2. Bakinskiy margarinovyy zavod (for
Pomogalov, Guli-Zade, Yevseyev). 3. Vsesoyuznyy nauchno-issledova-
tel'skiy institut shirov (for Zarembo).
(Baku--Margarine) (Weighting machines)

Journal of the Institute
of Petroleum

Vol. 40 No. 361
Jan. 1954
Products

92. Testing lubricating engine oils in tractors.
M. Mitrasinović and C. Guljas. Nafta (Yugoslavia),
4 (7), 221-7.--A number of field tests with
tractors shows that domestic lubricating
engine oils now in commercial use could stand a
tests period of 80-100 working hr before any
deterioration of the oil was observed. With
tractors which were in an undue mechanical state,
no improvement was brought about when more
viscous oils were used, as the useful time of an
oil in such an engine was only dependent upon the
extent of the mechanical incorrectness of the
engine. (Author's Abstract.)

(2)
Fuels

3

5/11 '58

GULJAS, G.

M.A.N. M-engines for all fuels. p. 303.

Periodical: NAFTA.

Vol. 9, no. 10, Oct. 1958.

TECHNOLOGY

SO: MOonthly List of East European Accessions (EEAI) LC

Vol. 8, No. 4
April 1959, Uncl.

GULKANYAN, N.O.

Torsion of prismatic rods of rectangular profile with the existence
of longitudinal cracks. Izv. AN Arm. SSR. Ser. Fiz-Met nauk 5 no.2:
67-96 '52. (MLRA 9:8)

1. Sektor matematiki i mehaniki Akademii nauk Armyanskoy SSR.
(Elastic rods and wires)
(Deformations (Mechanics))

ALEKSANDRYAN, Ye.A.; GULYANYAN, N.

Torsion of channel and T bars. Izv. AN Arm. SSR. Ser. FMET nauk 6
no. 3:37-51 My-Je '53. (MLRA 9:8)

1. Sektor matematiki i mehaniki AN Armyanskoy SSR.
(Elastic rods and wires)

GULKANYAN, N. O.

3

USSR

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Gulkanyan, N. O. On torsion of a prism of triangular cross-section. Akad. Nauk Armyan. SSR. Izv. Fiz.-Mat. Estest. Nauk 6, no. 5-6, 69-76 (1953). (Russian, Armenian summary)

An approximate solution of the Saint Venant torsion problem for a beam with a triangular cross section is deduced when the section is an isosceles or a right triangle. The boundary conditions are satisfied approximately by minimizing the square of the error in the assumed series solution. I. S. Sokolnikoff (Los Angeles, Calif.).

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GULKANYAN, N. O.
USSR/Mathematics - Elasticity theory

FD-953

Card 1/1 Pub 85-7/11

Author : Arutyunyan, N. Kh. and Gulkanyan, N. O. (Yerevan)

Title : Center of flexure of certain prismatic beams with polygonal cross-section

Periodical : Prikl. mat. i mekh. 18, 597-618, Sep/Oct 1954

Abstract : The presented method of solving the problem of center of flexure of certain prismatic beams with polygonal cross section is based on the solution of a general equation in elasticity theory. The method consists in the introduction of auxiliary functions reducing the solution of the problem in partial differential equations to the solution of ordinary differential equations of second order with constant coefficients. The values of the integration constants are defined from the solution of a regular infinite system of linear equations. Six references.

Institution : --

Submitted : January 1, 1954

GULKANYAN, N.O.

Bending centers of prismatic bars with isosceles trapezoid and
isosceles triangle cross sections. Izv.AN Arm.SSR.Ser.JMFT nauk
8 no.5:29-39 S-0 '55. (MLRA 9:3)

1. Sektor matematiki i mekhaniki AN Armyanskoy SSR.
(Elasticity)

GULKANYAN, N.O.

Torsion of prismatic rods of rectangular cross section and an unsymmetrical rectangular cutout. Izv. AN Arm. SSR. Ser. fiz.-mat. nauk 10 no.5:33-58 '57. (MIRA 11:2)

1. Institut matematiki i mekhaniki AN ArmSSR.
(Elastic rods and wires)

16(1)

AUTHOR: Gulkanyan, N.O. SOV/22-12-2-3/8

TITLE: On the Bending Center of Prismatic Bars of Rectangular Cross Section With an Unsymmetrical Rectangular Sector

PERIODICAL: Izvestiya Akademii nauk Armyanskoy SSR. Seriya fiziko-matematicheskikh nauk, 1959, Vol 12, Nr 2, pp 37-60 (USSR)

ABSTRACT: The author considers the torsionless bending of a hollow prismatic bar. The cross section is rectangular and has a rectangular aperture which lies eccentric, however, the boundaries of which are parallel to the boundaries of the cross section. By introduction of auxiliary functions according to [Ref 2] the problem is reduced to the solution of an infinite linear system of equations. It is proved that the obtained system is completely regular. The author gives very long explicit expressions for stresses and coordinates of the bending center. He calculates a numerical example for a quadratic cross section and a quadratic aperture. B.L. Abramyan, L.S. Leybenzon, and G.A. Grinberg are mentioned in the paper.

Card 1/2

On the Bending Center of Prismatic Bars of Rectangular SOV/22-12-2-3/8
Cross Section With an Unsymmetrical Rectangular Sector

There are 2 figures, 1 table, and 6 Soviet references.

ASSOCIATION: Institut matematiki i mekhaniki AN Armyanskoy SSR
(Institute for Mathematics and Mechanics, AS Armyanskaya
SSR)

SUBMITTED: May 27, 1958

Card 2/2

Culkaev, N.O.

Report presented at the 1st All-Union Congress of Theoretical and Applied Mechanics,
Moscow, 27 Jan - 3 Feb '60.

27

60. M. I. Gulyaev, Yu. V. Sosulin (Kazan): On a new method of solving the boundary theory of shallow shells with the help of differential integral equations.
61. Yu. Gulyaev, M. G. Borodov (Kazan): Solution of unsteady problems of hydrodynamics of viscous and viscoplastic fluids. (Kazan). An approximate stability analysis of flows in the elastoplastic range.
62. A. Gulyaev (Kazan): Shear modulus determining the plane flow of compressible plastic media.
63. A. Gulyaev (Kazan): On a problem of elastoplastic torsion of anisotropic disks.
72. I. S. Gurevich (Chernov): A dynamic problem for a rotating disk.
73. Yu. S. Gulyaev (Chernov): Perturbations in a new domain of applicability (Chernov) Perturbations in geophysical problems.
74. Yu. I. Dubovik, Yu. G. Karchev (Kazan): Determination and prediction of the time and regions of initiation of processes of soil and stone.
75. Yu. I. Dubovik (Kazan): Development of theory of propagation of seismic waves in soils of various degrees of saturation.
76. I. S. Gulyaev (Chernov): Some generalizations of the basic theory of soil mechanics.
77. I. S. Gulyaev (Chernov): The properties of longitudinal waves in a viscoelastic soil.
78. Yu. I. Dubovik, Yu. G. Karchev (Kazan): Determination and prediction of the time and regions of initiation of the processes of soil and stone.
79. Yu. I. Dubovik (Kazan): A generalized theory of plastic flow.
80. Yu. I. Dubovik (Kazan): Development of the theory of soils of the plastic state.
81. Yu. I. Dubovik (Kazan): The theory of fracture of soils.
82. Yu. I. Dubovik (Kazan): A general theory of soil mechanics.
83. Yu. I. Dubovik (Kazan): Development of the theory of soils of the plastic state.
84. Yu. I. Dubovik (Kazan): A perturbative treatment of the theory of the plastic state of soils.
85. Yu. I. Dubovik (Kazan): Perturbation theory of the plastic state of soils under the presence of a rigid cavity.
86. Yu. I. Dubovik (Kazan): On the theory of soils of the plastic state.
87. Yu. I. Dubovik (Kazan): On friction, shear and tension of soils under normal and shear stresses.
88. Yu. I. Dubovik (Kazan): On friction, shear and tension of soils under normal and shear stresses.
89. Yu. I. Dubovik, A. I. Shabotin (Kazan): Contribution to the theory of soils under normal and shear stresses.
90. Yu. I. Dubovik (Kazan): On elastoplastic deformation of saturated plates and disks.
91. A. A. Gulyaev (Kazan): Distribution of uniaxial shears of revolution for large displacements and strains.
92. O. A. Gulyaev (Kazan): Group analysis of thin-walled cylindrical shells.
93. Yu. I. Dubovik (Kazan): The general equations of soil mechanics and particular solutions.
94. Yu. I. Dubovik (Kazan): Torsion of an elastic layer.
95. Yu. I. Dubovik (Kazan): Stress distribution in rotated cylindrical shells under group deformations.
96. Yu. I. Dubovik, V. I. Moshkov (Kazan): Uniqueness theorems in the presence of cracks in an elastic half-space.
97. Yu. I. Dubovik (Kazan): Effect of shear stresses in the design of foundation strips of arbitrary rigidity under uniaxial compression.
98. Yu. I. Dubovik (Kazan): The bending of a hollow prismatic cylinder under eccentric loads.
99. Yu. I. Dubovik (Kazan): The statics equilibrium of an elastoplastic disk that is compressed between fixed rigid plates.
100. Yu. I. Dubovik (Kazan): A comparison of boundary value problems in a nonstationary theory of soil mechanics and the theory of a rotating shell.
101. Yu. I. Dubovik (Kazan): The calculation of a hollow cylindrical shell under the action of uniform pressure on its outer surface when the ratio of the outer to the inner radius is arbitrary.
102. Yu. I. Dubovik, R. I. Gulyaev (Kazan): Bending of cylindrical shells with an intermediate hole under external pressure.

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B112/B202

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AUTHORS: Abramyan, B. L., Gulkanyan, N. O.

TITLE: Torsion of a hollow two-layered hemisphere

PERIODICAL: Izvestiya Akademii nauk Armyanskoy SSR. Seriya fiziko-matematicheskikh nauk, v. 14, no. 1, 1961, 33-40

TEXT: The authors continue a series of torsion studies made by other scientists, especially those by K. S. Chobanyan (torsion of a cylinder with variable diameter), H. Saito and B. A. Kostandyan (torsion of a step-like cylinder), and S. Ch. Das (torsion of a two-layered cone and torsion of spheres and ellipsoids of revolution). The authors study a two-layered hollow hemisphere which is subject to torsion by an arbitrary axisymmetrical stress. The following differential equations are obtained for the displacement functions $\Psi_j^*(r, z)$ in cylindrical coordinates r, z :

$$\frac{\partial^2 \Psi_j^*}{\partial r^2} + \frac{\partial^2 \Psi_j^*}{\partial z^2} + \frac{2}{r} \frac{\partial \Psi_j^*}{\partial r} = 0, \text{ where the indices } j = 1, 2 \text{ refer to the}$$

Card 1/3